

ABSTRACT OF THE DISCLOSURE

The present invention provides a boiling water reactor nuclear power plant in which a reactor core support plate, upper grid plate, and a reactor core consisting of fuel assemblies supported by these plates are provided in the inner base portion of a nuclear reactor pressure vessel. Control rod guide tubes and a reactor core shroud are positioned over the upper grid plate, and a control rod drive mechanism is provided further above same, whereby the control rods can be inserted from above the reactor core, and natural circulation of cooling water inside the reactor can be achieved by means of a chimney effect of the control rod guide tubes. According to the above structure, there can be provided a compact and economical nuclear power plant.